

SERVICE MANUAL

HEATED LANDING ZONE (HLZ 18 AND HLZ 22)

This equipment chapter is to be inserted in the Equipment Manual.

MANUFACTURED BY FRYMASTER, L.L.C.
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**THIS SERVICE MANUAL SUPERCEDES
ALL PREVIOUS EDITIONS OF THE HLZ SERVICE MANUAL.**

**FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN
THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

**DO NOT OPERATE OR SERVICE THE HLZ SERIES WITHOUT FIRST READING THIS
MANUAL.**

**DO NOT OPERATE THE HLZ SERIES UNLESS IT HAS BEEN PROPERLY INSTALLED
AND CHECKED.**

**DO NOT OPERATE THE HLZ SERIES UNLESS ALL SERVICE AND ACCESS PANELS
ARE IN PLACE AND PROPERLY SECURED.**

**DO NOT ATTEMPT TO REPAIR OR REPLACE ANY COMPONENT OF THE HLZ SERIES
UNLESS ALL POWER TO THE UNIT HAS BEEN DISCONNECTED.**

**USE CAUTION WHEN SETTING UP, OPERATING, OR CLEANING THE HEATED
LANDING ZONE TO AVOID CONTACT WITH HEATED SURFACES.**

**HAZARD COMMUNICATION STANDARD, (HCS) - THE PROCEDURES IN THIS MANUAL
INCLUDE THE USE OF CHEMICAL PRODUCTS. THESE CHEMICAL PRODUCTS WILL
BE PRINTED IN BOLD FACE, FOLLOWED BY THE ABBREVIATION (HCS) IN THE TEXT
PORTION OF THE PROCEDURE. SEE THE HAZARD COMMUNICATION STANDARD,
(HCS) MANUAL FOR THE APPROPRIATE MATERIAL SAFETY DATA SHEET(S), (MSDS).**

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Printed in the United States

Service Hotline
1-800-24-FRYER

1. WARRANTY STATEMENT

The Frymaster Corporation makes the following limited warranties to the original purchaser only for this equipment and replacement parts:

WARRANTY PROVISIONS - HEATED LANDING ZONE

- A. The Frymaster Corporation warrants all components against defects in material and workmanship for a period of 1 year.
- B. All parts, with the exception of fuses, are warranted for 1 year after installation date of cabinet.
- C. If any parts, except fuses, become defective during the first year after installation date, Frymaster will also pay straight-time labor costs to replace the part, plus up to 100 miles/160 km of travel (50 miles/80 km each way).

PARTS RETURN

- A. All defective in-warranty parts must be returned to a Frymaster Authorized Factory Service Center within 60 days for credit. After 60 days, no credit will be allowed.

WARRANTY EXCLUSIONS

This warranty does not cover equipment which has been damaged due to misuse, abuse, alteration, or accident such as:

- improper or unauthorized repair;
- failure to follow proper installation instructions and/or scheduled maintenance procedures as prescribed in your MRC cards;
- improper maintenance;
- damage in shipment;
- abnormal use;
- removal, alteration, or obliteration of the rating plate;

This warranty also does not cover:

- transportation or travel over 100 miles/160 km (50 miles/80 km each way), or travel time over two (2) hours;
- overtime or holiday charges;
- consequential damages (the cost of repairing or replacing other property which is damaged), loss of time, profits, use or any other incidental damages of any kind.

There are no implied warranties or merchantability or fitness for any particular use or purpose.

For international warranty, the above procedures apply, except that the customer is responsible for freight and duty charges.

2. PARTS ORDERING AND SERVICE INFORMATION

Parts orders may be placed directly with your local Frymaster Factory Authorized Service Center (FASC)/Distributor. A list of Frymaster FASC/ Distributors was included with the unit when shipped from the factory. If you do not have access to this list, please contact the Frymaster Service Department at 1-800-24-FRYER or 1-318-865-1711.

To speed up your order, the following information is required:

Model Number _____
Serial Number _____
Voltage _____
Item Part Number _____

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Quantity Needed _____

Service may be obtained by contacting your local Frymaster Authorized Service Center/Distributor. Service information may be obtained by calling the Frymaster Service Department. The following information will be needed in order to assist you quickly and efficiently:

Model Number _____

Serial Number _____

Nature of the Problem _____

Also any other information which may be helpful in solving your service problem.

RETAIN AND STORE THIS MANUAL IN THE EQUIPMENT MANUAL FOR FUTURE USE.

3. HEATED LANDING ZONE

The **Heated Landing Zone** or **HLZ** is designed to hold assembled sandwiches. By circulating heated air evenly across the open staging area, the Heated Landing Zone keeps sandwiches hot without drying or cooking. The Heated Landing Zone meets all McDonald's standards for safety, efficiency, food safety, and cleanliness.

4. INSTALLATION/SETUP

Upon arrival, inspect the HLZ for concealed damage. Immediately report any damage to the delivering freight company. Claims must be filed within 15 days after receipt of the unit.

Make sure that the unit is placed on an even surface and that the area surrounding the HLZ is free of clutter that would interfere with air flow.

INSTALL OPTIONAL BURGER BUMPER (Units built before 10/98)

The burger bumper may be placed on either side of the HLZ to prevent pass through of product. Burger bumpers are provided by the KES. See figure 1.

INSTALL FILTER SCREEN (Units built after 10/98)

The filter screen is design to prevent debris from entering the Computer Cowl Assembly and clogging the blower assembly. Simply fit the part on to the vent opening of the computer cowl assembly. The filter screen will snap into position. If equipped with an optional holding screw, tighten screw to pull the filter screen snug into position.

POWER REQUIREMENTS:

- Voltage – Two models are available: 208 VAC and 240 VAC*
- Frequency - 60 Hz
- Single Phase
- 20 amp Service

5. OPERATION

1. Plug the unit into the power source.*
2. See "HLZ COMPUTER OPERATION AND PROGRAMMING, Section 7" for proper setup and operation of the computer.
3. Place product in the HLZ in accordance with the restaurant's established procedures.
4. **CLOSING** - When closing the store, remove all product from the HLZ and perform daily preventive maintenance in accordance with the MRC. Turn the computer OFF.

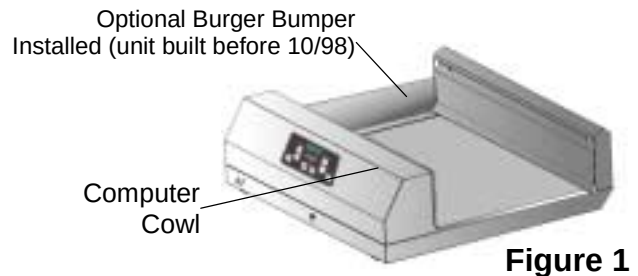


Figure 1

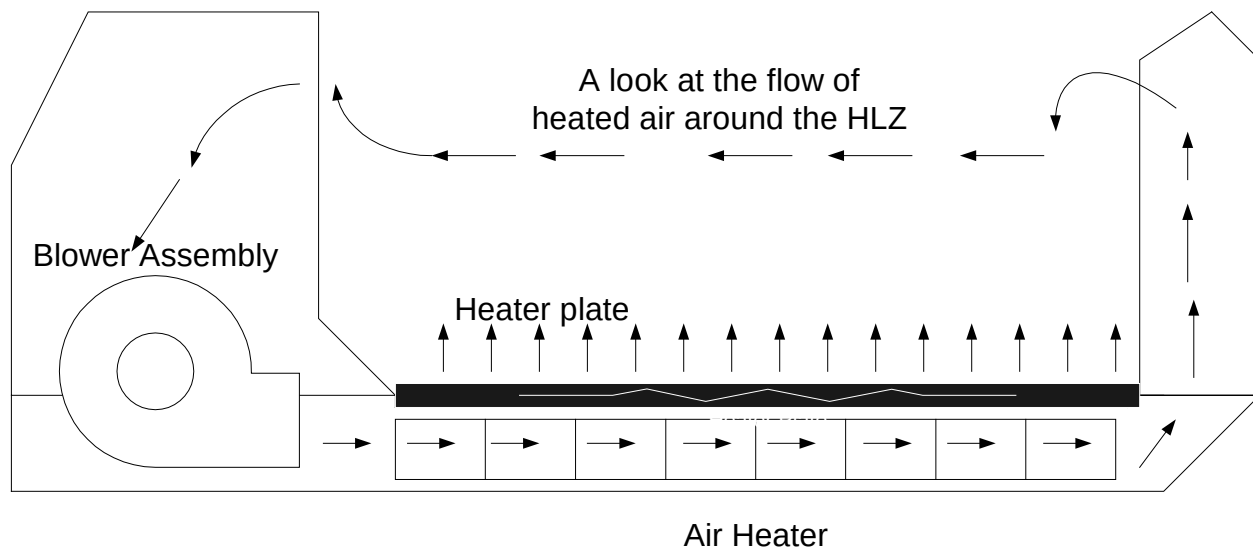
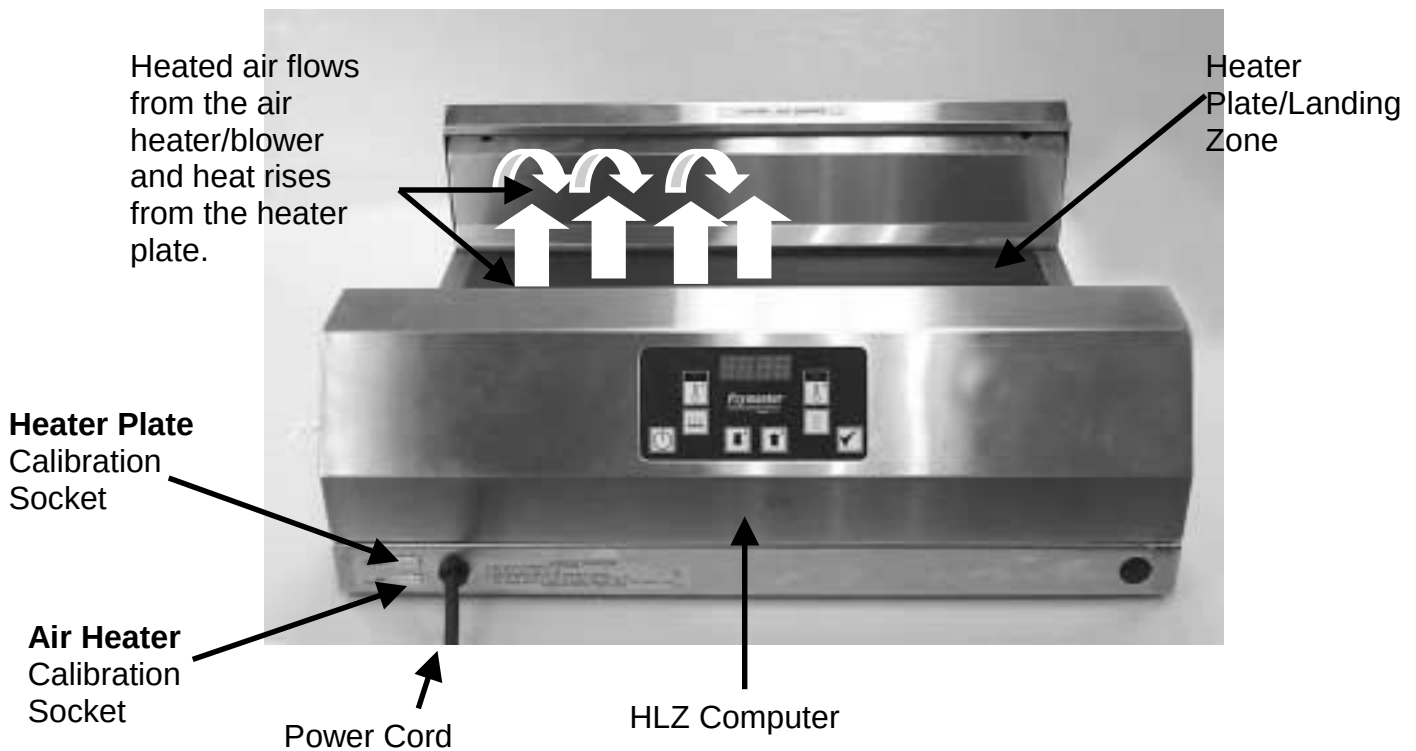


The filter screen snaps into place on rear of the air-intake tower.

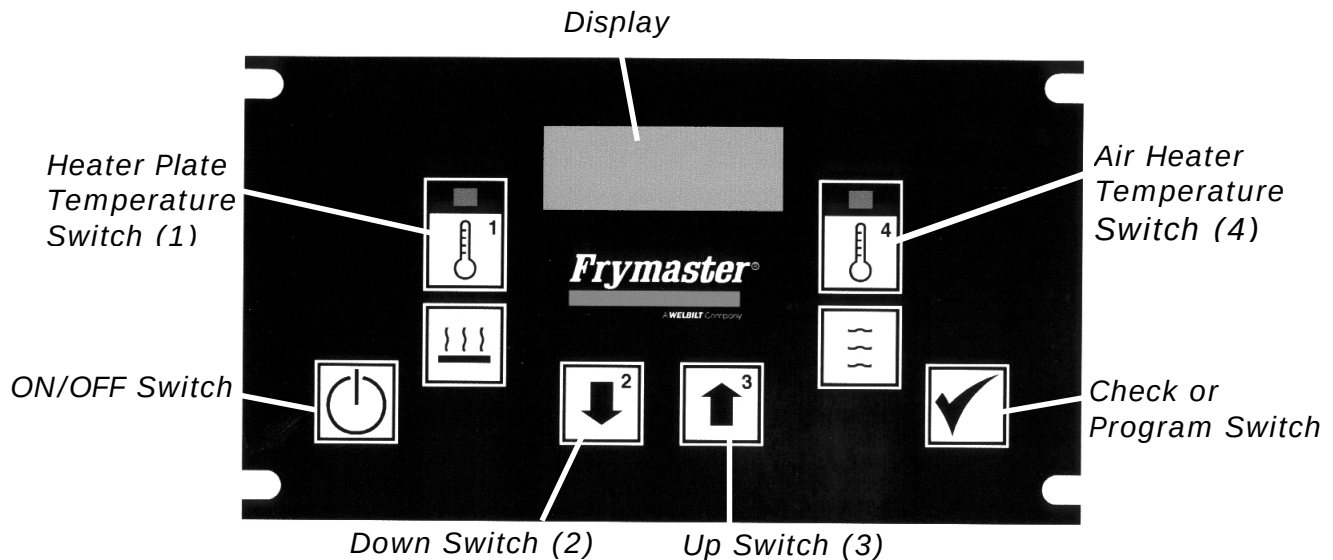
** If the 240 VAC model is operated on 208 VAC, the unit will heat slowly and may not reach maximum temperature. If the 208 VAC model is operated on 240 VAC, component damage is probable. To ensure proper operation, the power source should match the voltage on the rating plate on the bottom of the HLZ.*

THIS APPLIANCE IS EQUIPPED WITH A GROUNDING PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND MUST BE PLUGGED INTO A PROPERLY GROUND RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.

6. HLZ MODEL/COMPONENT IDENTIFICATION



7. HLZ COMPUTER OPERATION AND PROGRAMMING

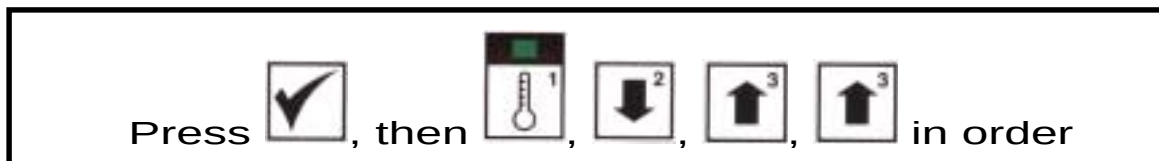


7. 1 Programming Temperature

You are able to program the setpoint temperature of both the air heater and the heater plate via the computer interface. The heater plate can be set between 140° F to 180° F -- the factory default is set to the McDonald's standard of 160° F. The air heater can be set between 170° F to 240° F -- the factory default is set to the McDonald's standard of 220° F. If the factory default temperature settings are acceptable, skip to Section 7.20, Page 6.

Ensure that the HLZ computer is in the OFF position (nothing in the display).

Press the check switch and enter the code (1,2,3,3). The numerals in the upper right-hand corner represent the key number.



The display will read SET and the LEDs on both the Heater Plate Switch (1) and the Air Heater Switch (4) will light. Press the switch that corresponds to the heater you wish to program.

Display reads **SET**,  and  LED's light.

Press  to program the heater plate or  to program the air heater.

Press the Up and Down Arrow Keys to achieve the desired set-point temperature, then press the Check Switch once. Both heater LEDs will again light.

Press  or  to get desired setpoint, then press  to lock the temperature in.

If you are finished with programming both heaters, press the Check Switch again to store the programmed setpoints and exit the programming mode OR to change the setpoint temperature for the other heater, press the corresponding Heater Switch (1 or 4). Program as described in Step 4.

When finished, press  again to exit programming mode. To change the other heater, press  to program the heater plate or  to program the air heater, then go to Step 4 for instructions.

7.2 Operation

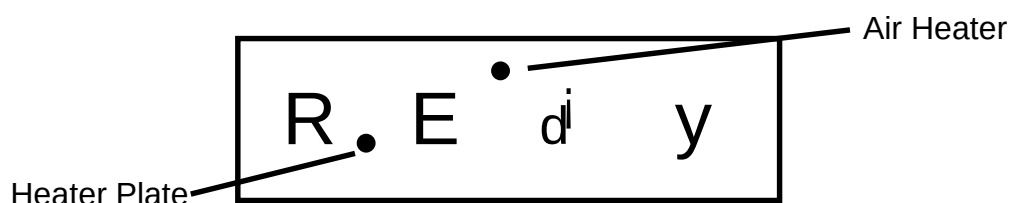
1. Press the ON/OFF switch to the ON position (the display will light and cycle through an initialization sequence). The display will read –LO- until the air heater and heater plate are within 15°F of setpoint. It will take approximately 10 minutes for the HLZ to achieve operating temperature.

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Press  to turn on the computer.

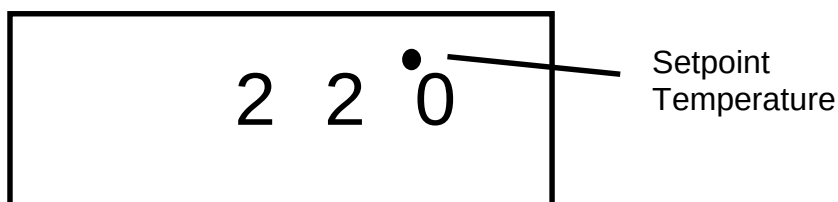
The display will read — LO — until both heaters are within 15° F of setpoint

NOTE: A small LED will light in a specific location in the display when either the heater plate or air heater is energized.

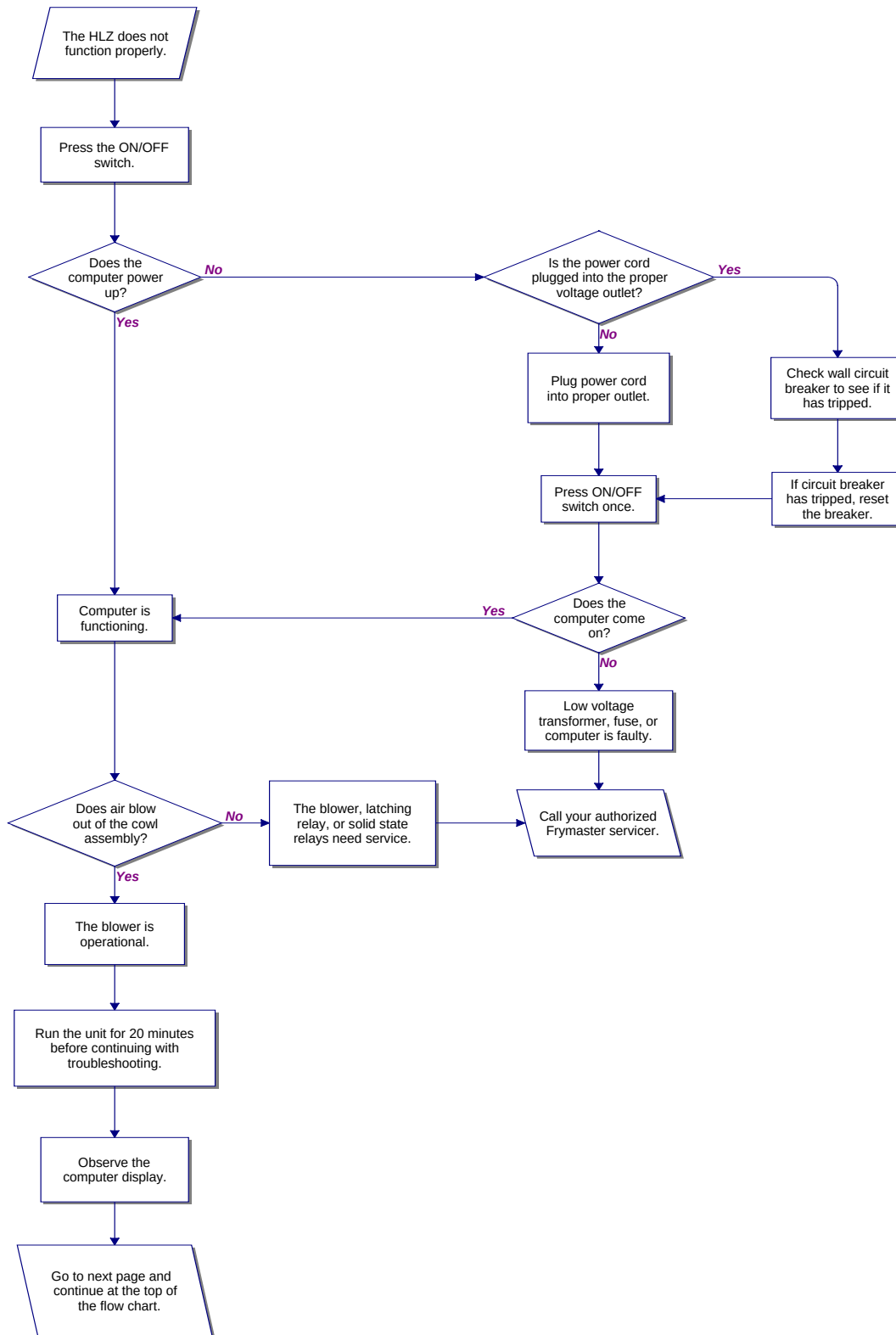


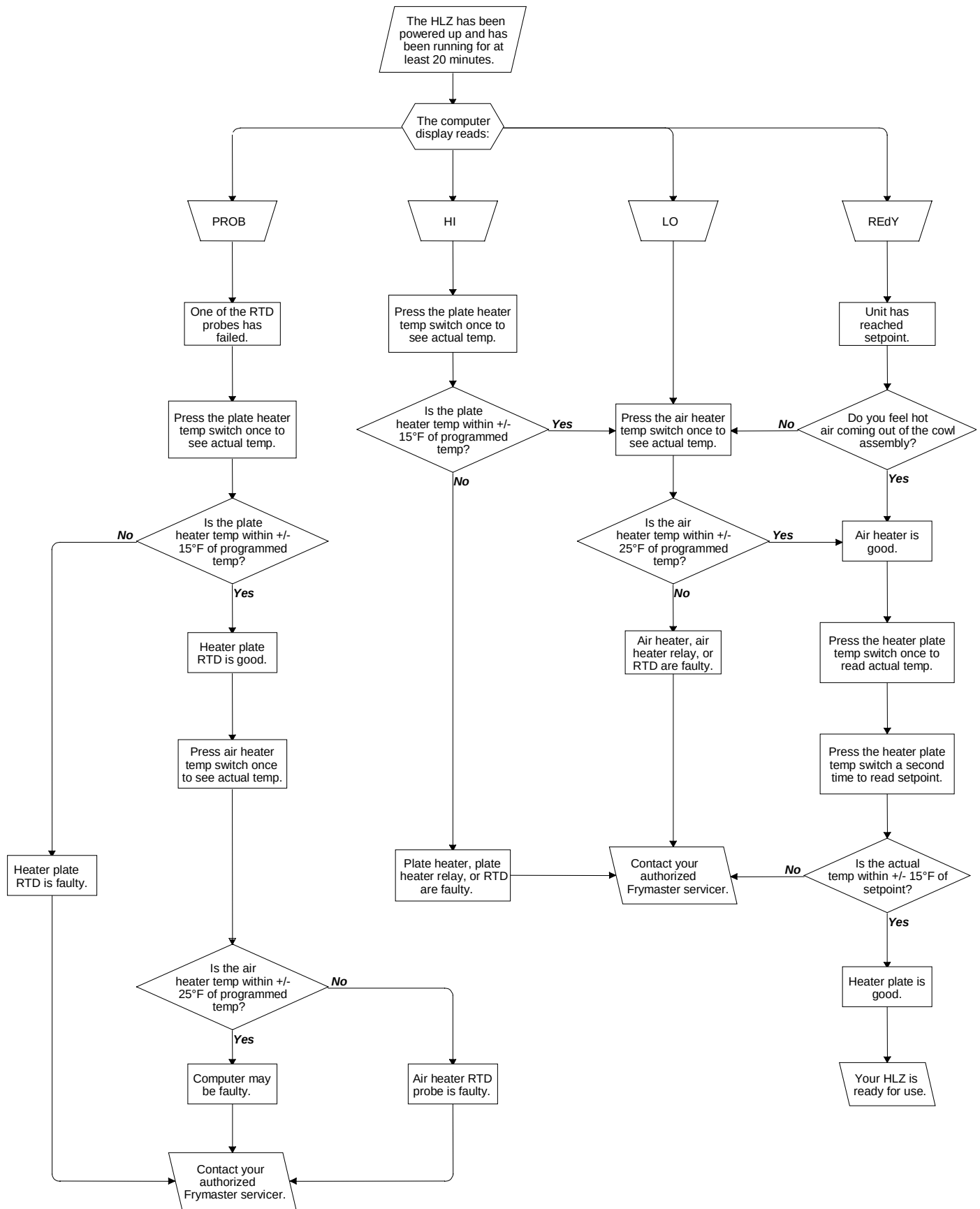
When the HLZ is ready for operation, the display reads REdY (ready). Place product in the HLZ in accordance with the restaurant's established procedures.

NOTE: To check the *actual* temperature of a heater, press the corresponding Temperature Switch once. To check the *setpoint* temperature of a heater, press the switch twice (an indicator will light when the setpoint is displayed).



8. HLZ Series Operator Troubleshooting





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9. SERVICE INFORMATION

9.1 PARTS LIST

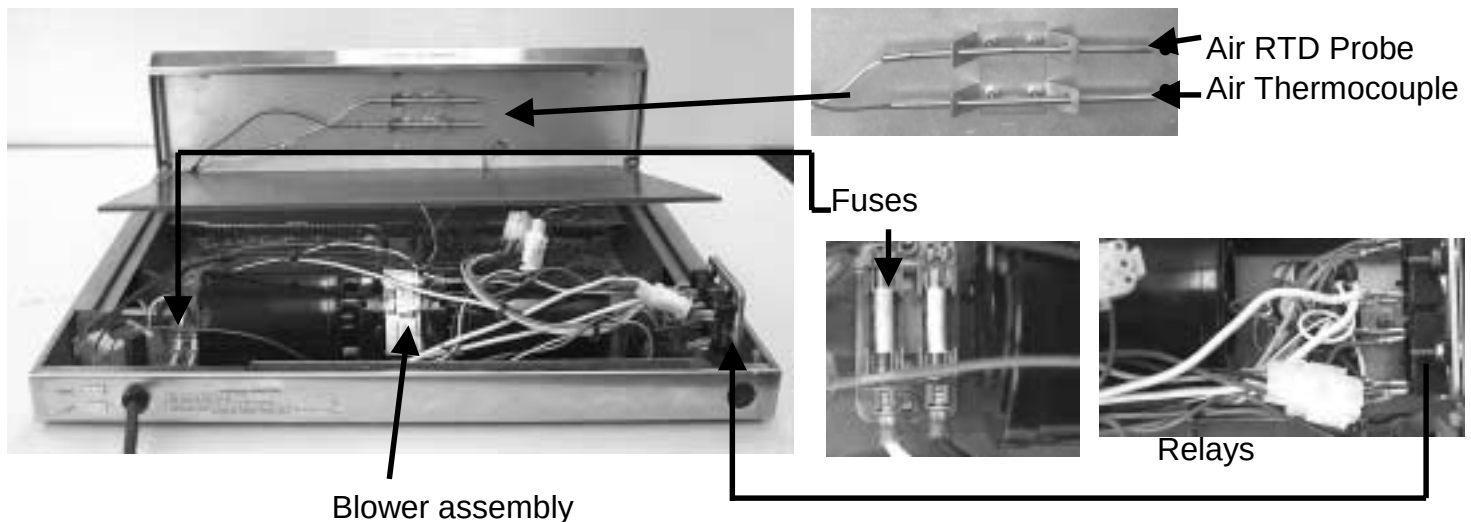
This parts list is correlated with the HLZ interior view found in section 9-2.

Item #	Description	Part Number
1	Transformer, 208V/240V/12V	807-0979
2A	Air Heater, 208V only	807-2945
2B	Air Heater, 240V only	807-3011
3	Shield, HLZ Heater	900-8073
4	Air RTD Probe	807-3036
5	Bracket, RTD/Thermocouple	900-8086
6	Delivery Air Back W/A	823-2741
7	Air Thermocouple	807-3043
8A	HLZ 22 Plate, Heater with RTD and Thermocouple, 208V/240V (22"x15.5")	806-9238
8B	HLZ 18 Plate, Heater with RTD and Thermocouple, 208/240V (22"x12")	806-9239
9	Plug Assembly, Computer	806-9146
10	Relay, Solid State Service Kit	826-1508
11	Relay, Latching	807-3021
12	Blower, 208V/240V	807-2953

Item #	Description	Part Number
13	Fuse Block	807-2820
14	Fuse, 20A	807-2819
15	Cord Set, Twist Lock, HLZ	807-3020
Not Shown	RTV#108 Silicone Rubber	811-0511
Not Shown	Gasket, HLZ Plate/Cowl	816-0418
Not Shown	Filter Screen	810-1724
Not Shown	Acrylic Tape, Double-Sided	811-0953
Not Shown	Computer Assembly, HLZ	806-9247
Not Shown	Cowl Assembly	823-2745
Not Shown	Cowl Tinnerman Clips	809-0448
Not Shown	Front Delivery Air W/A	823-2742
Not Shown	Lug, Grounding 14 GA	807-2972
Not Shown	Pad, HLZ Leg	816-0410

* Note: Burger Bumpers are not used on units built after 10/98.

9.2 Interior view of an HLZ (Cowl Assembly removed)



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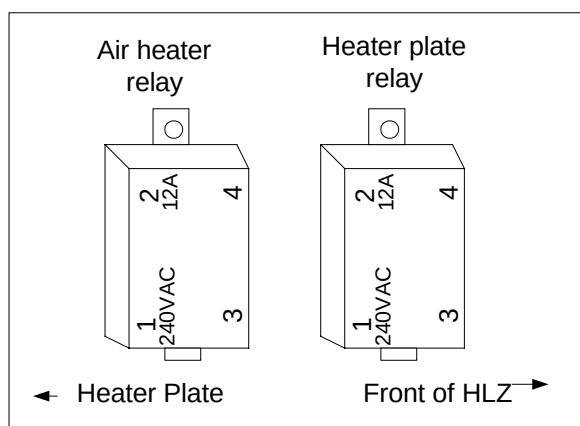
9.3 Procedures

1. Accessing the interior of the HLZ (Set up for testing):

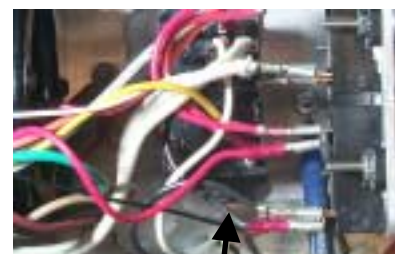
- Disconnect power cord from outlet.
- Turn unit on its side. Remove the five access screws located on the bottom of the unit.
- Then set the unit back down on its base. Place paper towels on the heater plate to protect it from scratching. Remove the cowl assembly and lay the cowl on the heater plate while troubleshooting.



The cowl assembly is held on by five screws, which are removed from the bottom of the unit.



The relays are best replaced by removing the plate that holds them in place. Two 5/16 nuts hold the plate in place.

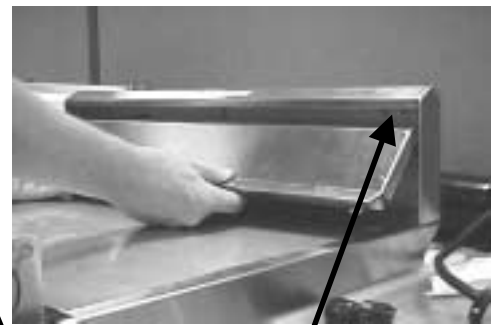


2. Replacing Solid State Relays:

- Avoid miswiring. Examine the terminals carefully and take notes to avoid miswiring.
- Remove the plate holding the relay assembly. The nuts holding the relays in place are easier to reach with the assembly out of the unit.
- Remove the two nuts holding relays to plate.
- Apply heat sink compound and install new relay.
- Reverse this procedure to reinstall.

3. Opening the Air Delivery Tower:

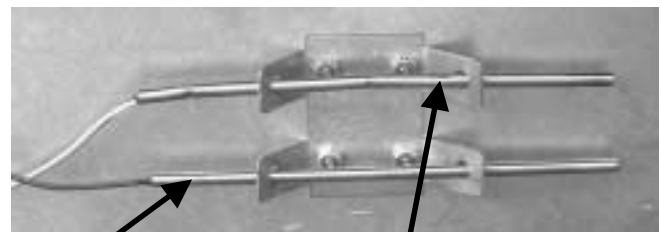
- a. The air thermocouple and air RTD are located in the air delivery tower. To access them, the front air delivery assembly must be removed.
- b. Insert a 5/16" nut driver through the front air delivery assembly access holes and turn the nuts counterclockwise to loosen. **Do not remove the nuts.** Grab the bottom flange of the front air delivery, push upwards and pull towards you. Be careful, there are two tabs on the front air delivery bottom that must clear the heater plate to allow removal of the front air delivery.



Components in the rear tower are accessed by loosening two nuts, one under each end of the overhang.

4. Replacing Air Thermocouple and Air RTD Probe:

- a. Follow procedures in section 9.3.2 to access the Air Delivery tower components.
- b. Cut old lead wires close to the faulty air thermocouple or Air RTD Probe. Disconnect lead wires at the test plug. Leave lead wires in place for now.
- c. Remove the faulty Air Thermocouple or Air RTD Probe from the bracket.
- d. Install the replacement Air Thermocouple or Air RTD Probe into the bracket.
- e. Attach the new lead wires to the old lead wires on the Air Thermocouple or Air RTD Probe on the bracket-side of unit. Grasp the old leads at the test plug and gently pull the leads towards you.
- f. Once the new lead wires have been pulled through, disconnect the old lead wires, and attach the new leads to the test plug.
- g. Go to step 9.3.2 and reassemble the air delivery tower.



Air Thermocouple

Air RTD Probe

5. Accessing the Plate and Air Heaters:

- a. Use the following method to remove the plate heater assembly or access the compartment underneath the plate heater.
- b. Remove the cowl assembly per step 9.3.1.
- c. Then remove the air delivery assembly following steps 9.3.2a and 9.3.2b.
- d. Insert a thin, sharp knife, i.e. Exacto-type, between the heater plate and the HLZ chassis. Carefully cut the silicon adhesive between the heater plate and the chassis.
- e. Lift the heater plate by prying up one end of the heater plate away from the HLZ chassis. The plate is held in place by an acrylic tape. It will be difficult to break the bond between the heater plate and chassis.
- f. Remove acrylic tape from the heater plate and frame to prevent rebounding while servicing.
- g. When reinstalling the heater plate, apply new acrylic tape to the HLZ chassis first. Then position the heater plate standing on its side against the back air delivery assembly. The heater plate leads should be coming off the “top” edge of the heater plate.
- h. Once the heater plate is aligned properly with the HLZ chassis, gently lower the heater plate until the plate end with the lead wires is approximately 2 inches from the chassis. Feed the leads through the opening in the chassis wall.
- i. Finish lowering the heater plate into place and connect the heater plate lead wires.

NOTE: A hot platen is easier to remove. The heat makes the adhesive holding the platen in place more pliable.



After cutting the acrylic adhesive between the heater plate and the HLZ chassis, use a screwdriver to gently lift the heater plate.



Gently lift the heater plate, which may still be stuck to the adhesive. Apply new acrylic tape to the chassis before reinstalling the heater plate.

6. Reinstalling the Cowl Assembly and Air Delivery Assembly/Gasket Installation:

a. Cowl Assembly:

1. Clean surface area thoroughly.
2. Remove any old adhesive.
3. Apply a new gasket to bottom edge of the cowl assembly.
4. Test fit the cowl assembly to see if a gap is visible once the cowl assembly is properly seated. If a gap remains, apply a second gasket to create a better seal.
5. Plug in the computer harness and reinstall the cowl assembly .



Apply gasket or sealant along this edge



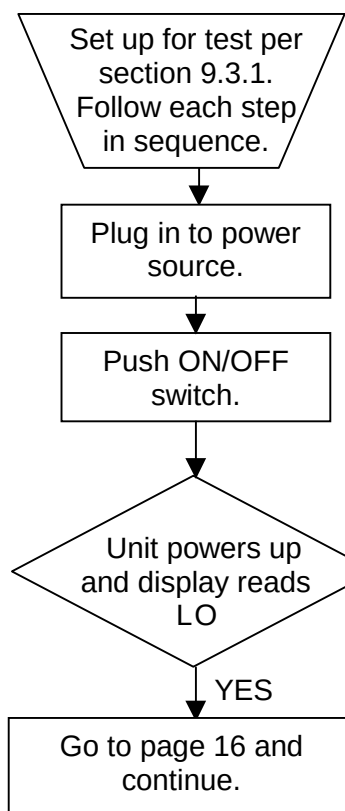
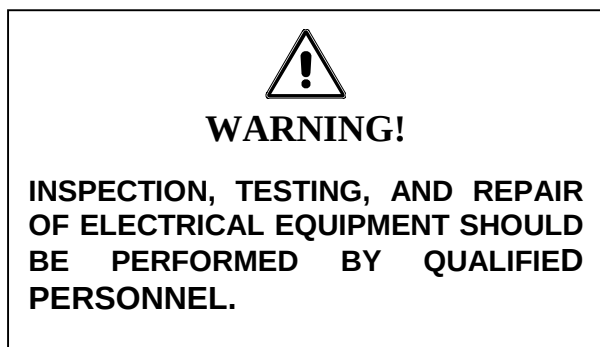
Apply gasket or sealant along this edge

b. Air Delivery Tower Assembly:

1. Clean surface area thoroughly.
2. Remove any old adhesive.
3. Apply new gasket along bottom edge of the front air delivery panel.
4. Test fit the air delivery assembly to see if a gap is visible once the assembly is properly seated. If a gap remains, apply a second gasket to create a better seal.
5. Make sure the brackets on the back-side of the front air delivery assembly slide up and under the nuts on the back air delivery mounting screws (see figure 9-8). Once the front air delivery tabs clear the heater plate and the front air delivery is seated, tighten the mounting screws to pull the front air delivery flush against the back air delivery assembly. An air seal is created between the lower sections of the front air delivery and back air delivery assemblies. This seal forces the heated air up the rear and then down the front-side of the front air delivery assembly. After reinstalling the air delivery tower, reseal around the heater plate with RTV #108 silicone rubber compound, PN 811-0511.

9.4 Troubleshooting Flow Charts:

1. Follow the flowchart on pages 15 - 18 to help locate and troubleshoot the most likely encountered problems. The flowchart will give possible solutions/corrective actions to be taken.
2. To use the flowchart, start at the top of the diagram. Follow each step in sequence. If the answer to a question is "yes", proceed downward to the next step. If the answer is "no", follow the arrow to the right to the possible solutions/corrective action boxes.
3. The left box offers possible solutions. The right box gives the corresponding test procedure to verify the possible solution or corrective action. Test procedures are found on pages 16 – 18.

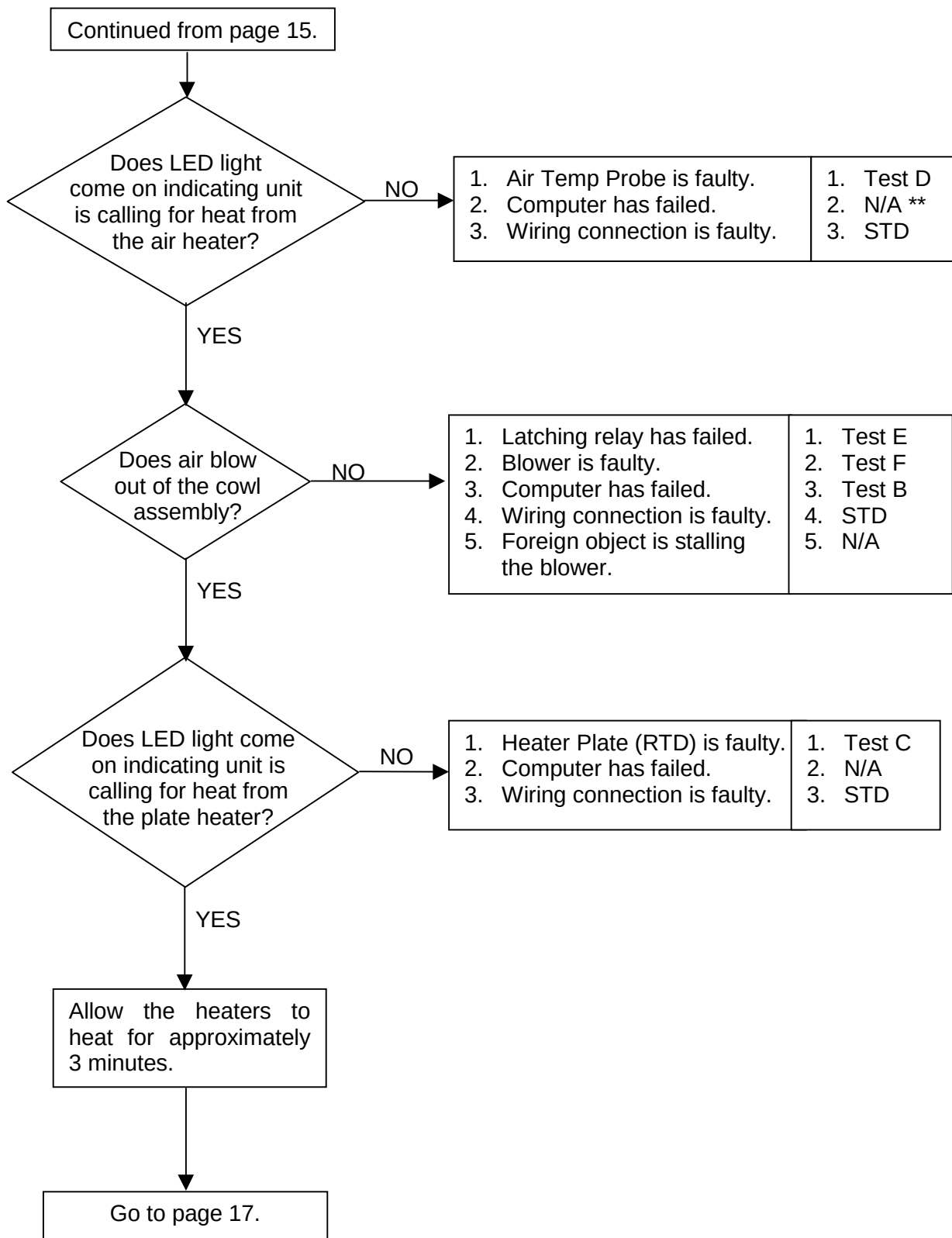


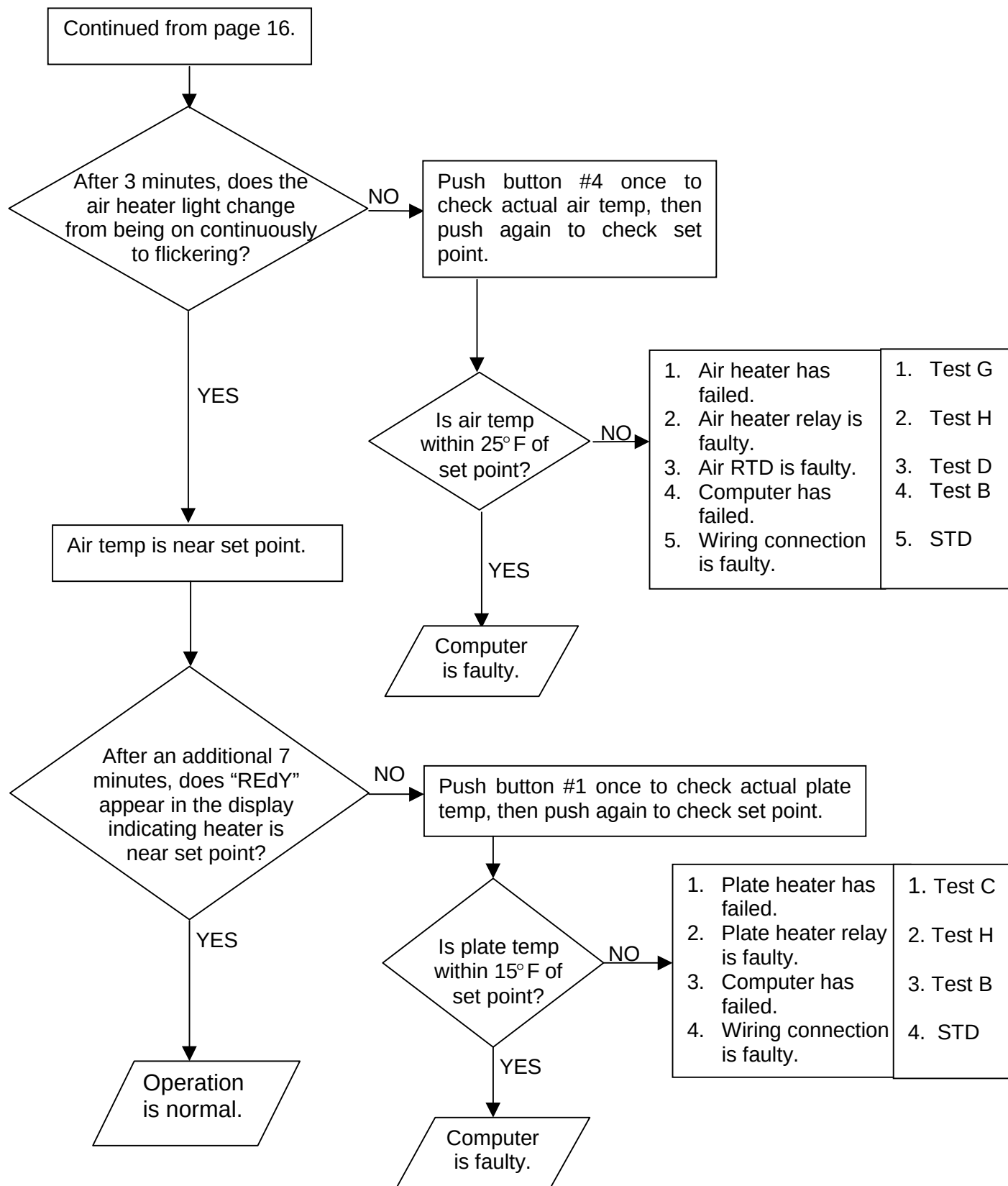
Notes: * REdY, HI, or PROB may also appear. REdY indicates the temperature is near set temp. HI indicates the temperature is above set temp. PROB indicates a defective probe circuit (air RTD or heater RTD).

** STD = Standard troubleshooting test.
N/A = No applicable test.

1. Incorrect or no voltage applied.
2. Tripped wall circuit breaker.
3. Blown 20A fuse.
4. Transformer has failed.
5. Computer is faulty.
6. Wiring connection is faulty.

1. STD **
2. STD
3. STD
4. Test A
5. Test B
6. STD





DANGER!

USE EXTREME CARE DURING ELECTRICAL CIRCUIT TESTS. LIVE CIRCUITS WILL BE EXPOSED.

9.5 Component Test Procedures

<u>TEST A - TRANSFORMER</u>	
1.	Set up HLZ series for testing per 9.3.1.
2.	a. Remove one wire from each side of transformer.
	b. Measure each side for resistance.
	c. Correct readings are:
	1. 208VAC HLZ series: line side – 200 (± 10) ohms.
	2. 240VAC HLZ series: line side – 235 (± 10) ohms.
	3. 208VAC and 240VAC HLZ series: load side – 1.1 (± 0.2) ohms (12VAC side).
	d. If resistances are incorrect, replace the transformer.
	e. Reconnect wires.
3.	a. Plug HLZ in. Check for 208VAC (or 240VAC) across the input (line) terminals of the transformer.
	b. Test for approximately 14VAC across the output (load) terminals of the transformer.
	c. If 208/240VAC is applied and output voltage is less than 10VAC, the transformer is defective.

<u>TEST B - COMPUTER</u>	
Input Power:	
1.	Set up HLZ series for testing per 9.3.1.
2.	Plug HLZ in.
3.	With connector unplugged, check for approximately 14 VAC between pins 1 and 3 on the 15-pin computer plug. (See figure 9-10, page 20)
4.	If voltage is low or missing, check transformer and wiring.
Output Power:	
1.	Plug connector into computer.
2.	Turn computer on.
3.	Check for approximately 10VDC from the “+” terminal (red wire) on the heater plate relay to ground.
4.	No output voltage indicates a faulty computer.

TEST C - PLATE HEATER

Plate Heater RTD:

1. Set up HLZ series for testing per 9.3.1.
2. Unplug 15-pin computer plug.
3. Measure resistance between pins 13 and 14 on the computer plug. (See figure 9-10, page 20)
4. Compare resistance with actual plate temperature using the resistance chart on page 21.

Plate Heater:

1. Set up HLZ series for testing per 9.3.1.
2. Measure heater resistance by connecting one meter lead to terminal 4 (white wires) on the latching relay and the other meter lead to the bottom black wire on the plate heater relay.
3. Correct reading is:
 - a. HLZ 18: 230 (± 15) ohms.
 - b. HLZ 22: 165 (± 15) ohms.

TEST D - AIR RTD PROBE

1. Set HLZ series up for testing per 9.3.1.
2. Unplug 15-pin computer plug.
3. Measure resistance between pins 14 and 15 on the computer plug. (See figure 9-10, page 20).
4. Compare resistance with actual air temperature using the resistance chart on page 21.

TEST E - LATCHING RELAY

1. Set up HLZ series for testing 9.3.1.
2. Remove the wire from either pin 1 or 0 of the latching relay.
3. Measure resistance between pin 1 and 0 of the latching relay.
4. Correct resistance is 84 (± 5) ohms.
5. If resistance is incorrect, replace the relay.
6. Reconnect the wire disconnected in step 2.
7. Remove and insulate wires from terminals 2, 4, 6, and 8 on the latching relay.
8. Turn the computer ON.
9. Test for approximately 12VDC between pins 1 and 0 on the latching relay.
10. Measure continuity between terminals 2 and 4, then terminals 6 and 8.
11. If no continuity between terminals 2 and 4, or terminals 6 and 8, the relay is defective.
12. Disconnect power.
13. Reconnect wires disconnected in step 7.

TEST F - BLOWER TEST

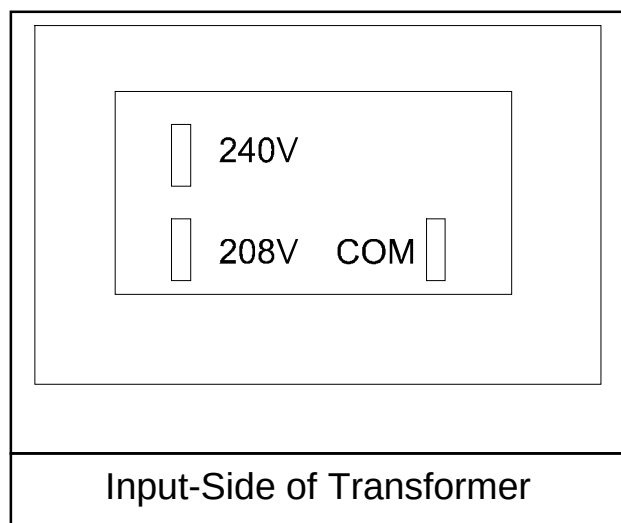
1. Set HLZ series up for testing per 9.3.1.
2. Disconnect the fan plug.
3. Measure resistance for:
 - a. 208V units: between the white and black wires.
 - b. 240V units: between the red and white wires.
4. Correct reading is :
 - a. 208V units: 60 (± 5) ohms.
 - b. 240V units: 67 (± 5) ohms.

TEST G - AIR HEATER

1.	Set HLZ series up for testing 9.3.1.
2.	Measure air heater resistance by connecting one meter lead to terminal 4 (white wires) on the latching relay and the other meter lead to the bottom white wire on the air heater relay.
3.	Correct reading is:
a.	208V heater: 22 (± 4) ohms.
b.	240V heater: 29 (± 4) ohms.

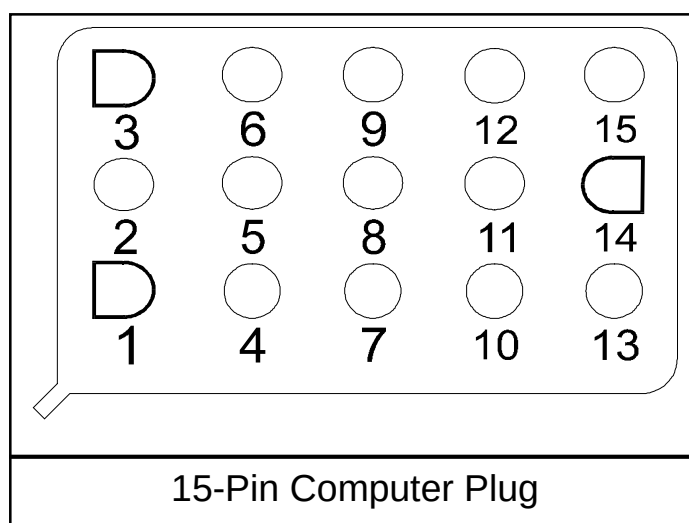
TEST H - SOLID STATE RELAYS (Air Heater and Plate Heater Relays)

1.	Set HLZ series up for testing 9.3.1.
2.	Turn computer ON.
3.	With the computer calling for heat (light on):
a.	Measure voltage across terminals 3 and 4 of the solid state relay.
b.	Correct reading is 10 (± 2)VDC.
4.	Disconnect power to the unit.
5.	Disconnect wires from the output side of the solid state relay.
6.	Reconnect power to the unit.
7.	With computer calling for heat (light on):
a.	Measure resistance across the relay output terminals.
b.	Correct reading is approximately 1000 ohms.
8.	Disconnect power to the unit.
9.	Reconnect wires disconnected in step 5.



Input-Side of Transformer

Figure 9-9



15-Pin Computer Plug

Figure 9-10

9.6 Air Heater/Plate Heater RTD Resistance Chart

C	/	F	=	OHMS
0	/	32	=	1000
1	/	33	=	1002
1	/	34	=	1004
2	/	35	=	1006
2	/	36	=	1008
3	/	37	=	1011
3	/	38	=	1013
4	/	39	=	1015
4	/	40	=	1017
5	/	41	=	1019
6	/	42	=	1021
6	/	43	=	1023
7	/	44	=	1025
7	/	45	=	1027
8	/	46	=	1030
8	/	47	=	1032
9	/	48	=	1034
9	/	49	=	1036
10	/	50	=	1038
11	/	51	=	1040
11	/	52	=	1042
12	/	53	=	1044
12	/	54	=	1046
13	/	55	=	1049
13	/	56	=	1051
14	/	57	=	1053
14	/	58	=	1055
15	/	59	=	1057
16	/	60	=	1059
16	/	61	=	1061
17	/	62	=	1063
17	/	63	=	1065
18	/	64	=	1068
18	/	65	=	1070
19	/	66	=	1072
19	/	67	=	1074
20	/	68	=	1076
21	/	69	=	1078
21	/	70	=	1080
22	/	71	=	1082
22	/	72	=	1084
23	/	73	=	1086
23	/	74	=	1089
24	/	75	=	1091
24	/	76	=	1093
25	/	77	=	1095
26	/	78	=	1097
26	/	79	=	1099
27	/	80	=	1101
27	/	81	=	1103
28	/	82	=	1105
28	/	83	=	1107
29	/	84	=	1110
29	/	85	=	1112
30	/	86	=	1114

C	/	F	=	OHMS
31	/	87	=	1116
31	/	88	=	1118
32	/	89	=	1120
32	/	90	=	1122
33	/	91	=	1124
33	/	92	=	1126
34	/	93	=	1128
34	/	94	=	1131
35	/	95	=	1133
36	/	96	=	1135
36	/	97	=	1137
37	/	98	=	1139
37	/	99	=	1141
38	/	100	=	1143
38	/	101	=	1145
39	/	102	=	1147
39	/	103	=	1149
40	/	104	=	1151
41	/	105	=	1154
41	/	106	=	1156
42	/	107	=	1158
42	/	108	=	1160
43	/	109	=	1162
43	/	110	=	1164
44	/	111	=	1166
44	/	112	=	1168
45	/	113	=	1170
46	/	114	=	1172
46	/	115	=	1174
47	/	116	=	1176
47	/	117	=	1179
48	/	118	=	1181
48	/	119	=	1183
49	/	120	=	1185
49	/	121	=	1187
50	/	122	=	1189
51	/	123	=	1191
51	/	124	=	1193
52	/	125	=	1195
52	/	126	=	1197
53	/	127	=	1199
53	/	128	=	1201
54	/	129	=	1204
54	/	130	=	1206
55	/	131	=	1208
56	/	132	=	1210
56	/	133	=	1212
57	/	134	=	1214
57	/	135	=	1216
58	/	136	=	1218
58	/	137	=	1220
59	/	138	=	1222
59	/	139	=	1224
60	/	140	=	1226
61	/	141	=	1229

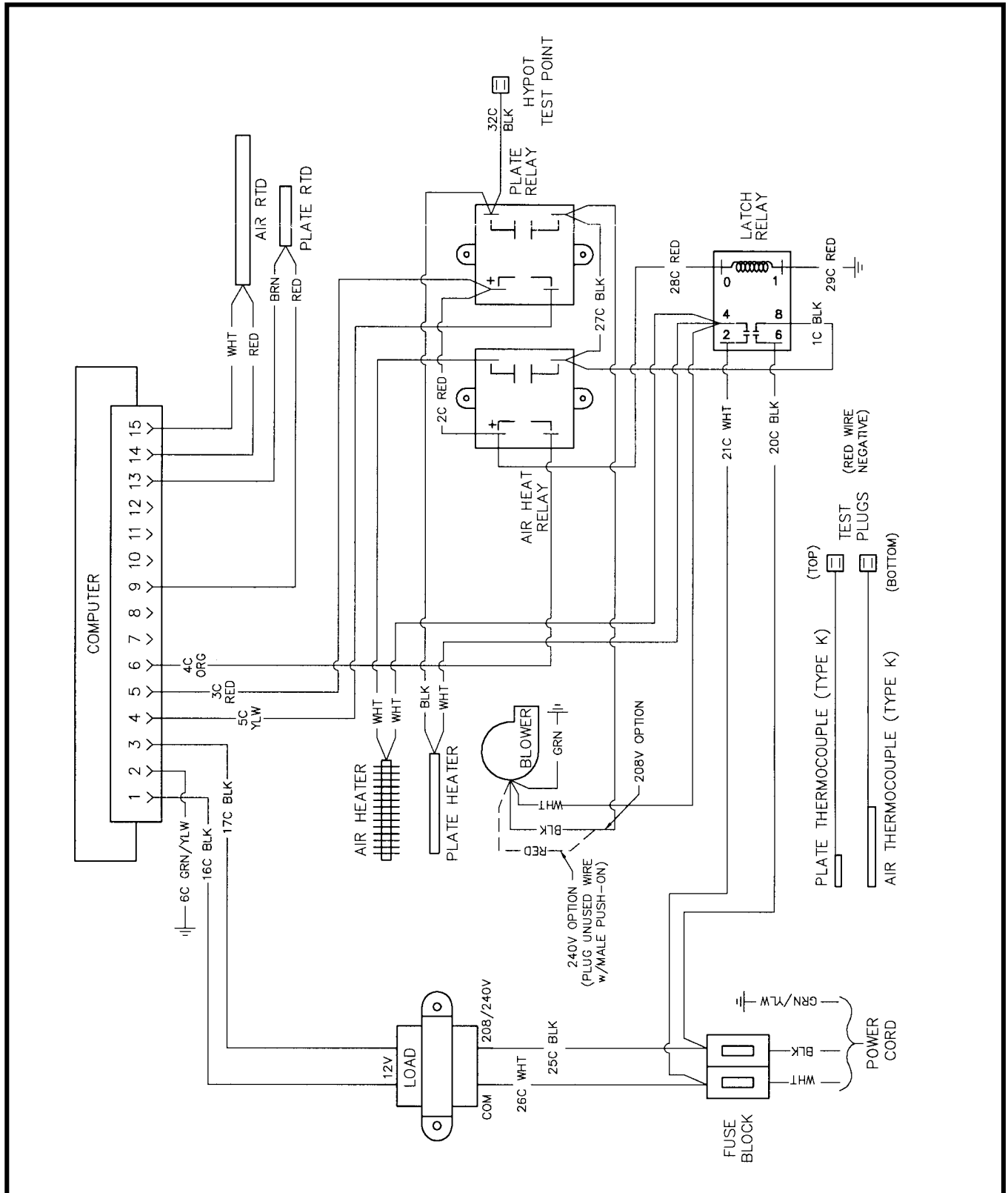
C	/	F	=	OHMS
61	/	142	=	1231
62	/	143	=	1233
62	/	144	=	1235
63	/	145	=	1237
63	/	146	=	1239
64	/	147	=	1241
64	/	148	=	1243
65	/	149	=	1245
66	/	150	=	1247
66	/	151	=	1249
67	/	152	=	1251
67	/	153	=	1253
68	/	154	=	1255
68	/	155	=	1258
69	/	156	=	1260
69	/	157	=	1262
70	/	158	=	1264
71	/	159	=	1266
71	/	160	=	1268
72	/	161	=	1270
72	/	162	=	1272
73	/	163	=	1274
73	/	164	=	1276
74	/	165	=	1278
74	/	166	=	1280
75	/	167	=	1282
76	/	168	=	1284
76	/	169	=	1287
77	/	170	=	1289
77	/	171	=	1291
78	/	172	=	1293
78	/	173	=	1295
79	/	174	=	1297
79	/	175	=	1299
80	/	176	=	1301
81	/	177	=	1303
81	/	178	=	1305
82	/	179	=	1307
82	/	180	=	1309
83	/	181	=	1311
83	/	182	=	1313
84	/	183	=	1315
84	/	184	=	1317
85	/	185	=	1320
86	/	186	=	1322
86	/	187	=	1324
87	/	188	=	1326
87	/	189	=	1328
88	/	190	=	1330
88	/	191	=	1332
89	/	192	=	1334
89	/	193	=	1336
90	/	194	=	1338
91	/	195	=	1340
91	/	196	=	1342

C	/	F	=	OHMS
92	/	197	=	1344
92	/	198	=	1346
93	/	199	=	1348
93	/	200	=	1350
94	/	201	=	1352
94	/	202	=	1354
95	/	203	=	1357
96	/	204	=	1359
96	/	205	=	1361
97	/	206	=	1363
97	/	207	=	1365
98	/	208	=	1367
98	/	209	=	1369
99	/	210	=	1371
99	/	211	=	1373
100	/	212	=	1375
101	/	213	=	1377
101	/	214	=	1379
102	/	215	=	1381
102	/	216	=	1383
103	/	217	=	1385
103	/	218	=	1387
104	/	219	=	1389
104	/	220	=	1391
105	/	221	=	1393
106	/	222	=	1395
106	/	223	=	1398
107	/	224	=	1400
107	/	225	=	1402
108	/	226	=	1404
108	/	227	=	1406
109	/	228	=	1408
109	/	229	=	1410
110	/	230	=	1412
111	/	231	=	1414
111	/	232	=	1416
112	/	233	=	1418
112	/	234	=	1420
113	/	235	=	1422
113	/	236	=	1424
114	/	237	=	1426
114	/	238	=	1428
115	/	239	=	1430
116	/	240	=	1432
116	/	241	=	1434
117	/	242	=	1436
117	/	243	=	1438
118	/	244	=	1440
118	/	245	=	1442
119	/	246	=	1444
119	/	247	=	1447
120	/	248	=	1449
121	/	249	=	1451
121	/	250	=	1453
122	/	251	=	1455

C	/	F	=	OHMS
122	/	252	=	1457
123	/	253	=	1459
123	/	254	=	1461
124	/	255	=	1463
124	/	256	=	1465
125	/	257	=	1467
126	/	258	=	1469
126	/	259	=	1471
127	/	260	=	1473
127	/	261	=	1475
128	/	262	=	1477
128	/	263	=	1479
129	/	264	=	1481
129	/	265	=	1483
130	/	266	=	1485
131	/	267	=	1487
131	/	268	=	1489
132	/	269	=	1491
132	/	270	=	1493
133	/	271	=	1495
133	/	272	=	1497
134	/	273	=	1499
134	/	274	=	1501
135	/	275	=	1503
136	/	276	=	1505
136	/	277	=	1507
137	/	278	=	1509
137	/	279	=	1512
138	/	280	=	1514
138	/	281	=	1516
139	/	282	=	1518
139	/	283	=	1520
140	/	284	=	1522
141	/	285	=	1524
141	/	286	=	1526
142	/	287	=	1528
142	/	288	=	1530
143	/	289	=	1532
143	/	290	=	1534
144	/	291	=	1536
144	/	292	=	1538
145	/	293	=	1540
146	/	294	=	1542
146	/	295	=	1544
147	/	296	=	1546
147	/	297	=	1548
148	/	298	=	1550
148	/	299	=	1552
149	/	300	=	1554
149	/	301	=	1556
150	/	302	=	1558
151	/	303	=	1560
151	/	304	=	1562
152	/	305	=	1564

Frymaster L.L.C., 8700 Line Avenue 71106, P.O. Box 51000, Shreveport, Louisiana 71135-1000
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9.7 Wiring Diagram



Wire Diagram 805-1044C

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APPENDIX A – PROTOTYPE UNITS (built before June 15, 1998)

A.1 Parts List For Prototype Units

A small quantity of units were manufactured before June 1998. The following is a list of replaceable parts for those units which are not in common with later production models:

HPLA 12 (On/Off Switch)	
Part Number	Description
807-2082	On/Off Switch
807-2512	Resistor 50W 100 ohm *
807-2954	Blower, 115V *
807-2278	Fuse, 20A
807-2447	Fuse Holder
812-1346	Cordset
806-8988	Controller, HPLA
807-2323	UHC Heater Plate, 18"
807-1568	Air RTD Probe

HPLA 12 (Computer)	
Part Number	Description
806-9155	Cowl Assembly
807-3002	Plate, Heater 12"
910-8138	Bumper, HPLA 18 Burger
806-9198	Computer Assembly, HLA
807-0067	Terminal Block (8-pin)
807-3020	Cordset

HPLA 18	
Part Number	Description
807-2278	Fuse, 20A
807-3020	Cordset, HLZ
812-1346	Cordset
807-2512	Resistor, 50W 100 ohm *
807-2954	Blower, HPLA 115V *
806-8988	Controller, HPLA
807-3005	Plate Heater, 18" HPLA24
807-2880	UHC Plate Heater 18"
806-9239	Plate Heater, 12" * *
806-9253	Bumper, Burger
807-0067	Terminal Block (8-pin)
806-9198	Computer, HLA
806-9155	Cowl Assembly

* Replace these components with PN 807-2953, Blower 208/240V. Remove resistor assembly as it is no longer needed if a 208V Blower is used.

** Correct resistance for this Plate Heater is 230 (± 15) ohms.